

## National Ambient Air Quality Standards - Working To Clean Utah's Air

## What are National Ambient Air Quality Standards (NAAQS)?

- •The Clean Air Act (CAA), which was last amended in 1990, requires EPA to set **National Ambient Air Quality Standards** (40 CFR part 50) for pollutants considered harmful to public health and the environment.
- •The CAA established two types of national air quality standards. *Primary standards* set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. *Secondary standards* set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.
- •The EPA Office of Air Quality Planning and Standards (OAQPS) has set National Ambient Air Quality Standards for six principal pollutants, which are called "criteria" pollutants.

## Why do NAAQS change?

- •Sections 108 and 109 of the CAA govern the establishment and revision of the NAAQS to provide protection for the nation's public health and the environment.
- •Each NAAQS is considered for revision at least every five years to determine if the levels of the standard remain protective.
- •In making changes to NAAQS, EPA considers recommendations from the Clean Air Scientific Advisory Committee (CASAC) and other stakeholder groups that have substantial experience with the NAAQS. Each NAAQS revision includes a public comment period and review process.

## What must Utah do when the NAAQS are revised?

• Upon the effective date of a NAAQS revision, the clock starts on the development of changes to Utah's State Implementation Plan (SIP) if necessary to bring a geographic area back into attainment with the NAAQS. The typical schedule is outlined below:

Effective Date	NAAQS revision is published in the Federal Register		
One year after effective date	The Governor recommends the attainment status fareas of the state		
Two years	Areas are designated by EPA that are in non-attainment		
Five years	SIP is due to EPA to address non-attainment areas		
Six years	Control strategies are fully implemented		
Six years or beyond	Attainment with the standard is required depending on the degree of non-attainment		



	Primary Standards		Second	Secondary Standards	
Pollutant	Level	Averaging Time	Level	Averaging Time	
Carbon Monoxide	9 ppm (10 mg/m3)	8-hour <sup>(1)</sup>	None		
	35 ppm (40 mg/m3)	1-hour <sup>(1)</sup>			
Lead	0.15 μg/m3 <sup>(2)</sup>	Rolling 3-Month Average	Same as Primary		
	1.5 μg/m <sup>3</sup>	Quarterly Average	Same as Primary		
Nitrogen Dioxide	53 ppb (0.053 ppm)	Annual (Arithmetic Average)	Same as Primary		
	100 ppb	1-hour <sup>(3)</sup>	None		
Particulate Matter (PM10)	150 μg/m <sup>3</sup>	24-hour <sup>(4)</sup>	Same as Primary		
Particulate Matter (PM2.5)	15.0 μg/m <sup>3</sup>	Annual <sup>(5)</sup> (Arithmetic Average)	Same as Primary		
	35 μg/m <sup>3</sup>	24-hour <sup>(6)</sup>	Same as Primary		
Ozone	0.075 ppm (2008 std)	8-hour <sup>(7)</sup>	Same as Primary		
	0.08 ppm (1997 std)	8-hour <sup>(8)</sup>	Same as Primary		
	0.12 ppm	1-hour <sup>(9)</sup>	Same as Primary		
Sulfur Dioxide	0.03 ppm	Annual (Arithmetic Average)	0.5 ppm (1300	3-hour <sup>(1)</sup>	
	0.14 ppm	24-hour <sup>(1)</sup>	μg/m3)		
	75 ppb <sup>(10)</sup>	1-hour	None		

<sup>(1)</sup> Not to be exceeded more than once per year.

- (5) To attain this standard, the 3-year average of the weighted annual mean PM2.5 concentrations from single or multiple community-oriented monitors must not exceed 15.0 µg/m3.
- (6) To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 μg/m3 (effective December 17, 2006).
- (7) To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm. (effective May 27, 2008)
- (8) (a) To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.
- (b) The 1997 standard—and the implementation rules for that standard—will remain in place for implementation purposes as EPA undertakes rulemaking to address the transition from the 1997 ozone standard to the 2008 ozone standard.
  - (c) EPA is in the process of reconsidering these standards (set in March 2008).
- (9) (a) EPA revoked the 1-hour ozone standard in all areas, although some areas have continuing obligations under that standard ("anti-backsliding").
- (b) The standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is < 1.
- (ii) (a) Final rule signed June 2, 2010. To attain this standard, the 3-year average of the 99th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 75 ppb.

<sup>(2)</sup> Final rule signed October 15, 2008.

<sup>(3)</sup> To attain this standard, the 3-year average of the 98th percentile of the daily maximum 1-hour average at each monitor within an area must not exceed 0.100 ppm (effective January 22, 2010).

<sup>(4)</sup> Not to be exceeded more than once per year on average over 3 years.